

QA64 – Mineral Oil and Constipation

QUESTION:

A client concerned about recurring constipation has been giving her four year old 1 tsp. of mineral oil per day mixed with her yogurt. The child had a very painful episode of constipation six months ago when the Dr recommended the mineral oil. What does the latest research show concerning mineral oil and fat soluble vitamin absorption? I've seen some conflicting information.

ANSWER:

Mineral oil has been a treatment for constipation for a long time, usually with chronic situations. Nutritional concerns have focused on decreased absorption of fat-soluble vitamins. However, a study of 25 children with chronic constipation treated with mineral oil found that there was a reduction in the serum level of beta-carotene, but no adverse effect on serum levels of retinol and alpha-tocopherol.¹ Mineral oil was administered between meals. A “clinical tip” in reference (2) states, “Use of mineral oil need not be discouraged unless the mineral oil is offered at mealtime. Fat-soluble-vitamin binding, if it occurs, is not as clinically significant as constipation”.

Mineral oil is not recommended for children under 4 years of age or those with neurological disorders, and should not be given with meals, because of risk for aspiration and lipoid pneumonia.³

In this case, further assessment of the current constipation is indicated, if the problem still exists. A single acute episode of constipation would not usually warrant continued use of mineral oil as a preventive intervention. Nutrition education regarding fiber and fluids in the child's diet would be the typical management/prevention recommendation. It is also good to review with the caregiver the usual preschool stooling patterns, frequency, and description. For ongoing problems, the family can discuss use of stool softeners and other products with the primary care provider.

References:

- 1) Clark JH, Russell GJ, Fitzgerald JF, Nagamori KE: Serum Beta-Carotene, Retinol, and Alpha-Tocopherol Levels during Mineral Oil Therapy for constipation. *Am J Dis Child* 1987 Nov;141(11):1210-2.
- 2) Isaacs JS, et al. “Children with Special Health Care Needs: A Community Nutrition Pocket Guide.” *Dietetics in Developmental and Psychiatric Disorders and the Pediatric Nutrition Practice Group of the ADA and Ross Products Division Abbot Laboratories, USA.* 1997. P. 63.
- 3) Bandla HP, Davis SH, Hopkins NE: Lipoid Pneumonia: A Silent Complication of Mineral Oil Aspiration. *Pediatrics* 1999 Feb;103(2):E19.